

CLAIMS

1. A pharmaceutical composition comprising a suitable pharmaceutical vehicle and an element chosen from the group consisting of a nucleotide sequence encoding a peptide of the ONECUT family, a vector comprising this nucleotide sequence, the polypeptide sequence encoded by this nucleotide sequence and/or a cell line transformed with said vector and expressing the peptide of the ONECUT family.
2. The pharmaceutical composition as claimed in claim 1, characterized in that the peptide of the family is HNF-6.
3. The pharmaceutical composition as claimed in claim 1, characterized in that the peptide of the family is OC-2.
4. The cellular pharmaceutical composition as claimed in claim 1, characterized in that the peptide of the family is OC-3.
5. The pharmaceutical composition as claimed in any one of the preceding claims, characterized in that said nucleotide and polypeptide sequences are human nucleotide and polypeptide sequences.
6. The pharmaceutical composition as claimed in any one of the preceding claims, characterized in that the vector is chosen from the group consisting of plasmids, viruses, phagemids, lipid vesicles, in particular cationic vesicles, liposomes or a mixture of these.
7. The use of the pharmaceutical composition as claimed in any one of the preceding claims, for preparing a medicinal product intended for the prevention and/or for the treatment of type 1 or type 2 diabetes or of disorders linked to diabetes, for the prevention and/or for the treatment of cancer, in particular of melanoma, and for the prevention and for the treatment of Waardenburg syndrome.
8. A method of therapeutic treatment of a patient, preferably of a human patient, likely to develop or

suffering from diabetes, from a cancer, in particular
from a melanoma, or from Waardenburg syndrome,
characterized in that the pharmaceutical composition as
claimed in any one of claims 1 to 4 is administered ex
5 vivo by isolating a body fluid or one or more cells
from the patient, treating said cells or the cells
present in this body fluid with the pharmaceutical
composition of the invention or with the vector
included in this pharmaceutical composition, and
10 reinjecting into said patient the transformed cells.